

PTO/SB/08A (08-03)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	09/432,503		
		Filing Date	November 2, 1999		
		First Named Inventor	Cech, Thomas R.		
		Art Unit	1635		
		Examiner Name	Jon E. Angell		
Sheet	1	of	2	Attorney Docket Number	015389-002611US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	A1				
	A2				

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Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
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	B2							<input type="checkbox"/>

* No citations/refs on this page

Examiner Signature		Date Considered	3-4-05
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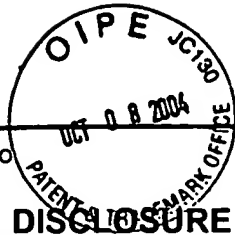
Institute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
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				<i>Art Unit</i>	1635
				<i>Examiner Name</i>	Jon E. Angell
				<i>Attorney Docket Number</i>	015389-002611US
Sheet	2	of	2		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	CAMPBELL, KEITH & WILMUT, IAN "Totipotency or Multipotentiality of Cultured Cells: Applications and Progress" Theriogenology, January 1997, pp. 63-72, Vol. 47, Issue 1, Elsevier Science Inc.	
	C2	GEARHART, JOHN "New Potential for Human Embryonic Stem Cells" Science, November 6, 1998; pp. 1061-1062, Vol. 282, Issue 5391.	
	C3	THOMSON, JAMES A. et al. "Embryonic Stem Cell Lines Derived from Human Blastocysts" Science, November 6, 1998; pp. 1145-1147, Vol. 282, Issue 5391.	
	C4		

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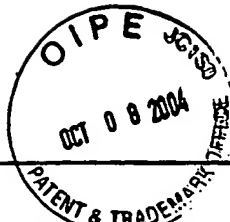
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INFORMATION DISCLOSURE
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Sheet 1 of 16

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Application Number	09/432,503
Filing Date	November 2, 1999
First Named Inventor	Cech, Thomas R., et. al.
Art Unit	1652
Examiner Name	Peter P. Tung
Attorney Docket Number	015389-002611US

U.S. PATENT DOCUMENTS

Examiner	Chg No.	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	08/761,189	11-15-98	Harrington, et al.	
	AB	60/038,750	02-20-1997	Counter, et al.	
	AC	3,817,837	06-18-1974	Tanenholtz et al.	
	AD	3,860,752	11-28-1974	Schuur et al.	
	AE	3,939,350	02-17-1076	Kronick et al.	
	AF	3,896,345	12-01-1976	Ullman et al.	
	AG	4,276,149	06-23-1081	Ullman et al.	
	AH	4,277,437	07-07-1981	Magglo	
	AI	4,368,241	12-28-1982	Tom et al.	
	AJ	4,683,195	07-28-1987	Mullis et al.	
	AK	4,683,202	07-28-1987	Mullis	
	AL	4,816,567	03-28-1988	Cabilly et al.	
	AM	4,965,188	10-23-1990	Mullis et al.	
	AN	5,489,608	02-06-1998	West et al.	
	AO	5,583,016	12-10-1996	Villeponteau et al.	
	AP	5,747,317	05-05-1988	Cao	
	AO	5,770,422	06-23-1998	Collins	
	AR	6,093,809	07-25-2000	Cech, et al.	
	AS	6,258,538 - B1	07-10-2001	Villeponteau et al.	
	AT	6,261,556 - B1	07-17-2001	Weinrich et al.	
	AU	6,261,838 - B1	07-17-2001	Cech et al.	
	AV	6,093,809	07-25-2000	Cech et al.	
	AW	6,168,178	12-29-2000	Cech et al.	
	AX	6,476,789 B1	11-09-2002	Cech et al.	

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		Country Code ²	Number ⁴ (Kind Code ² if known)				
	AY	JP	08154575-A		08-17-97		
	AZ	PCT	WO 84/03564		09-13-84		
	BA	PCT	WO 96/13382		05-18-95		
	BB	PCT	WO 96/01835		01-25-98		
	BC	PCT	WO 98/12811		05-02-98		
	BD	PCT	WO 98/18580		06-27-98		
	BE	PCT	WO 96/40868		12-19-98		
	BF	PCT	WO 98/01542		01-15-98		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet **2** of **17 10**

Complete If Known

Application Number	09/432,503
Filing Date	November 2, 1999
First Named Inventor	Cech, Thomas R., et. al.
Art Unit	1652
Examiner Name	Peter P. Tung
Attorney Docket Number	015389-002611US

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		Number	Kind Code ² (if known)			
	BG		PCT	WO 89/01543	01-15-98	
	BH		PCT	WO 88/07838	03-05-98	
	BI		PCT	WO 88/08938	02-26-98	
	BJ		PCT	WO 88/21343	05-22-98	
	BK		PCT	WO 88/37181	08-27-98	
	BL		PCT	WO 88/45450	10-15-98	
	BM		PCT	WO 88/59040	12/30/98	
	BN		PCT	WO 88/01560	01/14/99	

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Sheet	3	of	12 05 / 0

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
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	BO	1994 Genome Issue of <i>Science</i> (265:1981f)	
	BP	Anderson and Young, "Quantitative Filter Hybridization" in <i>Nucleic Acid Hybridization</i> pp73-111 (1985)	
	BO	Ausubel et al., (1989); Current Protocols in Molecular Biology, pp 5.1-5.11, 16.1-16.3 and 16.9-16.20; John Wiley & Sons, New York NY	
	BR	Autexier et al., "Reconstitution of human telomerase activity and identification of a minimal functional region of the human telomerase RNA," (1996) <i>EMBO J.</i> 15:5928	
	BS	Autexier and Greider, "Functional reconstitution of wild-type and mutant <i>Tetrahymena</i> telomerase," (1994) <i>Genes Develop.</i> 8:563	
	BT	Berger and Kimmel, <i>Guide to Molecular Cloning Techniques</i> , (1987); Meth. Enzymol.; vol. 152; pp 305-389; Academic Press; San Diego CA	
	BU	Blessman et al., "Addition of Telomere-Associated HeT DNA Sequences "Heals" Broken Chromosome Ends in <i>Drosophila</i> ," (1990) <i>Cell</i> , 61:663	
	BV	Bitter et al., "Expression and secretion vectors for yeast," <i>Meth Enzymol.</i> , (1987) 153:516	
	BW	Blackburn and Chiu, "Non-nucleosomal packaging of a tandemly repeated DNA sequence at termini of extrachromosomal DNA coding for rRNA in <i>Tetrahymena</i> ," (1981) <i>Proc. Natl. Acad. Sci.</i> , 78:2283	
	BX	Blackburn and Gall, "A tandemly repeated sequence at the termini of the extrachromosomal ribosomal RNA genes in <i>Tetrahymena</i> ," (1978) <i>J. Mol. Biol.</i> , 120:33	
	BY	Blackburn, "Telomerases," (1992) <i>Annu. Rev. Biochem.</i> , 61:113	
		Bodnar et al., "Extension of Life-Span by Introduction of Telomerase into Normal Human Cells," (1998) <i>Science</i> , 279:349	
		Bradford, "A Rapid and Sensitive method for the Quantitation of Microgram Quantities of Protein Utilizing the Principle of Protein-Dye Binding," (1976) <i>Anal. Biochem.</i> , 72:246	
		Braunstein et al., "Transcriptional silencing in yeast is associated with reduced nucleosome acetylation," (1998) <i>Genes Develop.</i> 7:592	

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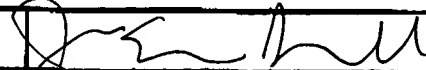
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		Calvo <i>et al.</i> , "Identification of hnRNP P2 as TLS/FUS using electrospray mass spectrometry," (1995) <i>RNA</i> , 1:724	
		Caruthers <i>et al.</i> , "New chemical methods for synthesizing polynucleotides," (1980) <i>Nucleic Acids Res. Symp. Ser.</i> , 215-223	
		Chan and Tye, "Organization of DNA sequences and replication origins at yeast telomeres," (1983) <i>Cell</i> , 33:563	
		Colbere-Garapin <i>et al.</i> , "A new dominant hybrid selective marker for higher eukaryotic cells," (1981) <i>J. Mol. Biol.</i> , 150:1	
		Cole <i>et al.</i> , "The EBV-hybridoma technique and its application to human lung cancer," <i>Monoclonal Antibodies and Cancer Therapy</i> , Alan R. Liss Inc., New York NY 77-96 (1985)	
		Collins <i>et al.</i> , "Purification of Tetrahymena telomerase and cloning of genes encoding the two protein components of the enzyme," (1995) <i>Cell</i> , 81:677	
		Conrad <i>et al.</i> , "RAP1 protein interacts with yeast telomeres in vivo: Overproduction alters telomere structure and decreases chromosome stability," (1990) <i>Cell</i> , 63:739	
		Coombes, <i>Dictionary of Biotechnology</i> , (1994): pp. 101-102, 283, 301 and 332; Stockton Press, New York NY	
		Cote <i>et al.</i> , "Generation of human monoclonal antibodies reactive with cellular antigens," (1983) <i>Proc. Natl. Acad. Sci.</i> , 80:2026	
		Counter <i>et al.</i> , "The catalytic subunit of yeast telomerase," (1997) <i>Proc. Natl. Acad. Sci.</i> , 94:9202	
		Counter <i>et al.</i> , (1994) <i>Proc. Natl. Acad. Sci.</i> , 91:2900	
		Creighton, <i>Proteins, Structures and Molecular Principles</i> , (1983): pp. 1-60; WH Freeman and Co; New York, NY	
		Dieffenbach and Dveksler, <i>PCR Primer, a Laboratory Manual</i> ; (1995) pp. 131-136, 453-462 and 507-580; Cold Spring Harbor Press, Plainview NY	
		Duplax <i>et al.</i> , "Quantitative analysis of polymerase chain reaction products using biotinylated dUTP incorporation," (1993) <i>Anal. Biochem.</i> , 213:229	

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	3-4-00

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		Fang et al., "Oxytricha telomere-binding protein: separable DNA-binding and dimerization domains of the α-subunit," <i>Genes Develop.</i> 7:870 (1993) and Gray et al., (1991) <i>Cell</i> 67:807	
		Feng et al., "The RNA Component of Human Telomerase," (1995) <i>Science</i> , 269:1236	
		GenBank Accession No. AA281298; April 2, 1997	
		Genbank accession no. AA289878; April 18, 1997	
		Genbank accession no. AA311750; April 19, 1997	
		Gilley et al., "Altering specific telomerase RNA template residues affects active site function," (1995) <i>Genes Develop.</i> , 9:2214	
		Gottesching and Coch, "Chromatin Structure of the Molecular Ends of Oxytricha Mononuclear DNA: Phased Nucleosomes and a Telomeric Complex," (1984) <i>Cell</i> , 38:501	
		Gottesching and Zaklan, "Telomere proteins: specific recognition and protection of the natural termini of Oxytricha macronuclear DNA," (1986) <i>Cell</i> 47:195	
		Grant et al., <i>Meth Enzymol.</i> , (1987) 153:516-544	
		Greenwood et al., "Phylogenetic relationships within the class oligohymenophorea, phylum ciliophora, inferred from the complete small subunit rRNA gene sequences of <i>Colpidium campyllum</i> , <i>Glaucoma chattoni</i> , and <i>Opisthionecta henneguyi</i> ," (1991) <i>J. Mol. Evol.</i> , 3:163	
		Greider and Blackburn, "A telomeric sequence in the RNA of Tetrahymena telomerase required for telomere repeat synthesis," (1989) <i>Nature</i> , 337:331	
		Greider and Blackburn, "Identification of a specific telomere terminal transferase activity in Tetrahymena extracts," (1985) <i>Cell</i> , 43:405	
		Greider, "Telomerase is processive," (1991) <i>Mol. Cell. Biol.</i> , 11:4572	
	Greider, "Telomere Length Regulation," (1996) <i>Ann. Rev. Biochem.</i> , 65:337		

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		Filing Date	November 2, 1999
		First Named Inventor	Gech, Thomas R., et. al.
		Art Unit	1652
		Examiner Name	Peter P. Tung
Sheet 6 of 10	Attorney Docket Number	015389-002611US	

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		Hampton et al., <i>Serological Methods & Laboratory Manual</i> ; (1990); pp. 33-86, 179-286; APS Press, St Paul MN	
		Harrington et al., "A Mammalian Telomerase-Associated Protein," (1997) <i>Science</i> , 275:973	
		Harrington et al., "Human telomerase contains evolutionarily conserved catalytic and structural subunits," (1997) <i>Genes Dev.</i> , 11:3109	
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		Hudson et al., "An STS-based map of the human genome," (1995) <i>Science</i> , 270:1945	
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		Art Unit	1652
		Examiner Name	Peter P. Tung
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		Lamond and Sproat: (1994) "Isolation and Characterization of Ribonucleoprotein Complexes," in <i>RNA Processing: A Practical Approach</i> , (Higgins, S.J. and Hawes, B.D., Eds.), Volume 1; pp103-140	
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		Filing Date	November 2, 1999
		First Named Inventor	Cech, Thomas R., et. al.
		Art Unit	1652
		Examiner Name	Peter P. Tung
		Attorney Docket Number	015989-002611US
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		Murray, in <i>McGraw Hill Yearbook of Science and Technology</i> , (1992) McGraw Hill, New York NY, pp 191-196	
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		Nielsen et al., (1993) "Peptide nucleic acids (PNAs): Potential antisense and anti-gene agents," <i>Anticancer Drug Des.</i> , 8:53	
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		First Named Inventor	Cech, Thomas R., et. al.
		Art Unit	1652
		Examiner Name	Peter P. Tung
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		Sendell et al., "Transcription of yeast telomere alleviates telomere position effect without affecting chromosome stability." (1994) <i>Proc. Natl. Acad. Sci.</i> , 91:12061	
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		First Named Inventor	Cech, Thomas R., et. al.
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		Wellinger et al., "Saccharomyces Telomeres Acquire Single-Strand TG ₁₋₃ Tails Late In S Phase," (1993) <i>Cell</i> 72:51	
		Whitehead Institute/MIT Center for Genome Research, Genetic Map of the Mouse, Database Release 10, April 28, 1995	
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